

IN THE CLAIMS:

Please amend claim 1 as follows:

1. (Currently Amended) An apparatus for collecting optically sorted particles comprising:
- A¹
- a first surface adapted to support a plurality of particles,
- an optical illumination system for subjecting the particles to a moving optical gradient force field to cause the selective separation of the at least a portion of the particles away from the first surface, and
- a second adhesive surface for adhering at least a portion of the separated particles to the second surface.
2. (Original) The apparatus of claim 1 wherein the adhesive surface has a specific affinity.
3. (Original) The apparatus of claim 1 wherein the adhesive surface has a non-specific affinity.
4. (Original) The apparatus of claim 1 wherein the first surface is planar.
5. (Original) The apparatus of claim 1 wherein the first surface is parallel to the second surface.
6. (Original) The apparatus of claim 1 wherein the first surface comprises a glass slide.
7. (Original) The apparatus of claim 1 wherein the first and second surfaces

define a volume therebetween.

8. (Original) The apparatus of claim 7 wherein the volume includes a fluid.

9. (Original) The apparatus of claim 8 wherein the fluid has an index of refraction which is between the indices of refraction of the particles.

[Please add the following new claims:]

--10. (New) The apparatus of claim 1, wherein the particle is a cell.

11. (New) A method of sorting particles comprising the steps of:
providing a volume defined by a first surface and a second surface, the volume containing a plurality of particles disposed adjacent to the first surface, the second surface comprising an adhesive surface;
providing an optical illumination system having a moving optical gradient field;
moving the optical gradient field in a direction towards the second surface so as to cause the selective separation of at least a portion of the particles away from the first surface such that at least a portion of the separated particles adheres to the second surface.

12. (New) The method of claim 11, wherein the first surface and the second surface are parallel to one another.

13. (New) The method of claim 11, wherein the particle is a cell.

14. (New) The method of claim 11, wherein the adhesive surface has a specific affinity.

A¹ 15. (New) The method of claim 11, wherein the adhesive surface has a non-specific affinity.

16. (New) The method of claim 11, further comprising the step of removing particles that remain disposed adjacent to the first surface. --
